

Date: Sun, 5 Jun 94 04:30:21 PDT  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V94 #170  
To: Ham-Ant

Ham-Ant Digest                      Sun, 5 Jun 94                      Volume 94 : Issue 170

Today's Topics:

                    Balloons and Antennas (2 msgs)  
                                Balun question  
            Curing RF Voltage on Rig case in Mobile Units (2 msgs)  
                    Impedence of a car radio antenna (2 msgs)  
                                VHF/UHF Antennas on Jeep  
            Want to hear your experience with AE (2 msgs)  
    Want to hear your experience with AEA Isoloop. (2 msgs)

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Fri, 3 Jun 94 15:14:00 -0600  
From: ihnp4.ucsd.edu!swrinde!news.uh.edu!nuchat!cld9!cms.tech@network.ucsd.edu  
Subject: Balloons and Antennas  
To: ham-ant@ucsd.edu

What factors should I consider in running an antenna way up in the air  
with a helium filled weather balloon? It seems like you could run the  
antenna 300-400 feet up and really bring in the signals. With a little  
anchoring, a light wind wouldn't be a problem.

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Date: Sat, 04 Jun 94 21:51:03 EDT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!uwm.edu!caen!  
malgudi.oar.net!hypnos!voxbox!jgrubs@network.ucsd.edu  
Subject: Balloons and Antennas

To: ham-ant@ucsd.edu

-----BEGIN PGP SIGNED MESSAGE-----

cms.tech@cld9.com (Cms Tech) writes:

> What factors should I consider in running an antenna way up in the air  
> with a helium filled weather balloon? It seems like you could run the  
> antenna 300-400 feet up and really bring in the signals. With a little  
> anchoring, a light wind wouldn't be a problem.

I tried it once. It wasn't worth the work it took to get it up.

-----BEGIN PGP SIGNATURE-----

Version: 2.6

iQCVAgUBLfEvuTDUWq8RWEeNAQEagwP9EYGTjhUH10yHCnKk1e3Aw0A2If+UvFG7  
6zkQG4YqT+a2aYNFuhxYHhjYyNt28HTHSi/gs0k0GjvyZlNn1PAogkkqXFH7tSxh  
fj03m9lekVwhT/NqAFnFQ0EDboA8wILVE4I6jY7hcp10rKsK7TZkVqp2cJtRw2Km  
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=VXqB

-----END PGP SIGNATURE-----

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|           I am Homer of Borg.  Prepare to be...00oooooo!  Donuts!!!           |
| Jim Grubs, W8GRT                Voxbox Enterprises    THIS SPACE FOR RENT      |
| jgrubs@voxbox.norden1.com       6817 Maplewood Ave.   RATES REASONABLE        |
| Fido: 1:234/1.0                 Sylvania, Ohio 43560  Home: 419/882-2697      |
|           AMATEUR RADIO - The National Park of the Mind                       |
+-----+
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Date: Sat, 4 Jun 1994 15:38:40 GMT  
From: ihnp4.ucsd.edu!agate!iat.holonet.net!vectorbd!jp11@network.ucsd.edu  
Subject: Balun question  
To: ham-ant@ucsd.edu

smithson@ACM.ORG wrote:

: I pulled out my Antenna book and looked up baluns. Trying to get more  
: educated, I see that two kinds really exist; voltage and current. Looking  
: at the schematics for both, it looks to me like a voltage balun should  
: appear to be shorted at DC while a current balun should not. The book  
: also recommends a current balun for this type of application.

I rather prefer the ferrite toroid / coax balun that W1JR described in a 1979 issue of HamRadio for those 1:1 applications. "n" number of turns of coax on a moderate sized form. Dunno how better to describe it nor the exact issue. Pretty sure it was the yearly antenna issue of 1979.

--

-Jim Lill-  
jpll@vectorbd.com  
wa2zkd@wb2psi.#wny.ny.usa.na

Vector Board BBS  
716-544-1863/2645  
GEnie: ZKD

-----  
Date: 4 Jun 1994 20:48:13 GMT  
From: ihnp4.ucsd.edu!swrinde!gatech!news.byu.edu!news@network.ucsd.edu  
Subject: Curing RF Voltage on Rig case in Mobile Units  
To: ham-ant@ucsd.edu

I am trying to solve a problem with RF Voltage on the Case of my TS-850S while running mobile. My configuration is the following:

Antenna: Carolina Bug Katcher 40m-10m Adjustable Trap Vertical  
Rig: Kenwood TS-850SAT (w/built in Antenna Tuner)  
Car: 1984 Subaru Coupe  
Antenna Mounting: A four Magnet Mag-mount in a 2x2 array sitting on top  
of the roof with the Antenna mounted in the Center

I Don't use the Rig in the Car on a very frequent basis so I don't want to drill any holes per se or any other things that would cause the XYL to complain.

When I key up the Rig, I'll get a real good RF shock if I touch the metal bracket on my microphone. I've tried just about everything I know to cure the problem. First I ran a good sized power cable direct from the battery (about 10 ga. wire) for both the Power and ground for the rig. I should note that I did install a radio shack automotive RFI filter (rated at about 40 amps) in line near the battery. Second, I ran a separate ground cable (about 10 ga. again thinking it would minimize as much as I could any inductance in that path) about 4 ft. long and grounded it to a bolt which ties one of the front seats to the floor of the car (and therefore the car body) and connected the other end to the wingnut ground on the case of the rig. Third, I ran a separate wire, about 12-14ga. up to a wingnut I installed at the magmount base of the antenna, thinking that the antenna wasn't coupling properly to the body of the car (thinking it was supposed to capicitively couple to the roof through the magnets-and thier vinyl protecting pads) and attached the other end to the same grounding point on the Radio. I have experimented with disconnecting the base grounding wire at the antenna base end and reconnecting it- to no avail, and have found the using the internal antenna tuner (after tuning the antenna to at least 2:1 or

even better SWR). Any suggestions? I would appreciate any help especially from those who have delt with these kinds of problems running mobile before.

Vince Hadley  
KA7GVQ  
hadleyv@bones.et.byu.edu

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Date: 4 Jun 1994 23:07:09 GMT  
From: ihnp4.ucsd.edu!agate!blanket.mitre.org!eff!news.kei.com!ssd.intel.com!  
chnews!cmoore@network.ucsd.edu  
Subject: Curing RF Voltage on Rig case in Mobile Units  
To: ham-ant@ucsd.edu

Vince B. Hadley (hadleyv@et.byu.edu) wrote:  
: problem. First I ran a good sized power cable direct from the battery (about:  
Vince Hadley

Hi Vince, it's a common problem in vehicles. Your transceiver chassis and car body are not at the same RF potential. Your ground run back to your battery is part of your antenna system. A short run of coax shield from my transceiver to the S10 chassis cured my problem. I had to find some metal, scrape off the paint, drill a hole, and mount a star washer/lug there. My ground strap is about one ft. long and works. Something else that should work is an artificial ground which is like an antenna tuner for your ground wire. Your mag mount aggravates the problem since it depends on who knows what amount of capacitance to achieve an RF ground.

You can tell the \*real\* HF hams by the RF scars on their lips. :-)

73, KG7BK, CecilMoore@delphi.com

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Date: 4 Jun 1994 15:07:34 GMT  
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.duke.edu!concert!  
hearst.acc.Virginia.EDU!portal.gmu.edu!mason1.gmu.edu!snkhan@network.ucsd.edu  
Subject: Impedence of a car radio antenna  
To: ham-ant@ucsd.edu

Can anyone tell me what is the impedence of a normal radio antenna in cars?

Thanks.

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Date: Sat, 4 Jun 94 20:39:00 -0800

From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!netline-fddi.jpl.nasa.gov!nntp-server.caltech.edu!news.claremont.edu!kaiwan.com!ledge!bob.albert@network.ucsd.edu  
Subject: Impedence of a car radio antenna  
To: ham-ant@ucsd.edu

The impedance of a whip antenna for AM broadcast, such as one finds on most cars, is high. The cable connecting it isn't coaxial cable, but a sort of shielded wire that has very low capacitance.

Definitely not suitable for amateur radio use.

73 DE K6DDX

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Date: 5 Jun 1994 03:42:05 GMT  
From: tymix.Tymnet.COM!niagara!flanagan@uunet.uu.net  
Subject: VHF/UHF Antennas on Jeep  
To: ham-ant@ucsd.edu

In article <2snhi8\$h54@hplvec.lvld.hp.com> scott@lvld.hp.com (Scott Turner) writes:

>I'm looking for anyone's experiences in mounting 2m, 440 and/or dual  
>band antennas on CJ's or Wranglers.

My wife's car is a 91 Wrangler with an aftermarket hardtop. Her dual-band radio drives a Larson dual-band thru-glass antenna mounted on one of the side windows.

If she ever takes the top off, she'll probably use a mag-mount in the center of the hood! :)

73, Dick

--

Dick Flanagan, W6OLD  
dick@libelle.com

w6old@n6qmy.#nocal.ca.usa.na  
CIS:73672,751 GENie:FLANAGAN

-----  
Date: 4 Jun 1994 16:18:16 GMT  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!newsserver.jvnc.net!yale.edu!noc.near.net!news.delphi.com!domonkos@network.ucsd.edu  
Subject: Want to hear your experience with AE  
To: ham-ant@ucsd.edu

>Hello:

>I am presently considering buying an AEA Isolooop for HF. Does someone here

>have experience with this antenna? Please let me know about the effectiveness  
>of this antenna for HF, if used in an apartment balcony on the third floor.  
>  
>Thanks very much for your help.  
>//Mohan  
>--

The ISOLLOOP is VERY effective. I've been using one in my attic now nearly 2 years and am impressed w/the results. I've worked both SSB and CW DX from Germany to Australia w/sig rpts from 5-3 to 5-7 on 20M and 30M. During pileups I've worked the same DX the local 'big guns' have using their tribanders, granted I'm not nearly as strong as they are but I do get the contacts and have held lengthy QSO's.

The one caveat is the length of the coax seems to have an effect on the lowest SWR you'll get. The antenna is in the attic in the clear and initially had 36 feet of RG-8 feeding it. The SWR on 10 and 20M was 2:1 at the lowest so I added another 9 feet of coax (using couplers) and now I get less than 1.5:1 on all bands (1:1 on most).

Be patient using the tuner. Install it exactly as described so the tuner LED's respond to audio strength. I fast tune until I hear and see the peak, then back the speed down all the way and fine tune.

Good luck and enjoy...

Andy N3LCW

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Date: Sat, 4 Jun 1994 19:41:05 GMT  
From: ihnp4.ucsd.edu!agate!library.ucla.edu!csulb.edu!csus.edu!netcom.com!  
rogjd@network.ucsd.edu  
Subject: Want to hear your experience with AE  
To: ham-ant@ucsd.edu

Andy Domonkos (domonkos@delphi.com) wrote:

: >Hello:  
: >I am presently considering buying an AEA Isolloop for HF. Does someone here  
:  
: >have experience with this antenna? Please let me know about the  
: effectiveness  
: >of this antenna for HF, if used in an apartment balcony on the third floor.  
: >  
: >Thanks very much for your help.  
: >//Mohan

: >--

: The ISOLOOP is VERY effective. I've been using one in my attic now nearly 2  
: years and am impressed w/the results. I've worked both SSB and CW DX from  
: Germany to Australia w/sig rpts from 5-3 to 5-7 on 20M and 30M. During  
: pileups I've worked the same DX the local 'big guns' have using their  
: tribanders, granted I'm not nearly as strong as they are but I do get the  
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: initially had 36 feet of RG-8 feeding it. The SWR on 10 and 20M was 2:1 at  
: the lowest so I added another 9 feet of coax (using couplers) and now I get  
: less than 1.5:1 on all bands (1:1 on most).

: Be patient using the tuner. Install it exactly as described so the tuner  
: LED's respond to audio strength. I fast tune until I hear and see the peak,  
: then back the speed down all the way and fine tune.

: Good luck and enjoy...

: Andy N3LCW

Me too! I also have an Isolooop in the attic. It works quite well. If  
you can't put a dipole up, the Isolooop should compare very closely to the  
results you'd get with a dipole, at least per my comparisons.

The one caveat is tht the dipole is easier to tune. But once you get the  
hang of the loop its not such a big deal.

Good luck!

73

--

rogjd@netcom.com  
Glendale, CA  
AB6WR

-----  
Date: 4 Jun 1994 11:27:02 -0400  
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net  
Subject: Want to hear your experience with AEA Isolooop.  
To: ham-ant@ucsd.edu

In article <CqruHF.M36@Cadence.COM>, pmohan@fonzie (Mohan Pakkurti -  
6441) writes:

>I am presently considering buying an AEA Isoloop for HF. Does  
someone here  
have experience with this antenna?

Mine's been up for almost two years now. It is mounted about 8'  
above a sheet metal chimney cap, but otherwise in the clear. Since  
putting up the Isoloop, I've confirmed 225 countries, won contest  
awards for the 1993 CQ and ARRL DX contests (15m cw, low power  
unassisted for 6-land), and have all zones except 34 confirmed. The  
constant retuning is a pain, but since I remember the days of having  
to dip the grid on my transmitter, I get by. I tried the auto-tuner,  
but couldn't get the same SWRs on some bands, so use just the manual  
tuner.

No doubt about it, the antenna works.

Danny Goodman AE9F/6

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Date: Sat, 4 Jun 1994 21:33:10 GMT  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!  
library.ucla.edu!csulb.edu!csus.edu!netcom.com!netcomsv!cirrus!csparc046!  
ebs@network.ucsd.edu  
Subject: Want to hear your experience with AEA Isoloop.  
To: ham-ant@ucsd.edu

In article <CqruHF.M36@Cadence.COM>, pmohan@fonzie (Mohan Pakkurti - 6441) writes:

|> Hello:  
|> I am presently considering buying an AEA Isoloop for HF. Does someone here  
|> have experience with this antenna? Please let me know about the effectiveness  
|> of this antenna for HF, if used in an apartment balcony on the third floor.  
|>  
|> Thanks very much for your help.  
|> //Mohan  
|> --  
|>  
|>  
|> KB8PIP  
|>  
|>  
|>  
|> ~~~~~

I am also considering buying or building a HF loop antenna. Has  
anyone had a chance to try out the new MFJ-1786 HI-Q Loop ? The price  
looks reasonable and the tuning demo at Dayton was impressive, but I can't  
find a distributor that has one. MFJ says they are on back order (6-8wks).



Has anyone else had better luck ?

Thanks in advance,

Eric KC5EQI

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End of Ham-Ant Digest V94 #170

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